Changing Views on Autism Spectrum Disorders at North Topsail Elementary School

Needs Assessment Plan

MIT 530

Melissa Ennis

Amanda Hodges

Kristen Lee

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Introduction

Autism, as defined by The Autism Society of America, is "…a complex developmental disability that typically appears during the first three years of life and is the result of a neurological disorder that affects the normal functioning of the brain, impacting development in the areas of social interaction and communication skills. Both children and adults with autism typically show difficulties in verbal and non-verbal communication, social interactions, and leisure or play activities" (ASA, 2006). Students who have this disorder require a differentiated curriculum that may include, but is not limited to speech therapy, behavioral therapy, social intervention, physical and occupational therapy, as well as educational resource classes.

According to the Individuals with Disabilities Education Act, all students with special needs must be afforded a free and appropriate education beginning at age three and ending at age twenty-one, if required. All considerations for meeting the individual's needs must also be provided in the least restrictive environment by the appropriate local education agency (IDEA, 2006). At North Topsail Elementary School (NTES) there are currently three students with autism enrolled in kindergarten, second and third grade classes. During the 2006-2007 school year, based on current early registration information, seven additional students with autism will also be attending the school.

The principal of NTES, Dr. Georgia Fonville, has expressed concern about the introduction of this new population of learners, because NTES has never housed students with autism, and the current teachers and staff have little or no experience in working with these children. In response to this growing concern, a needs assessment will be conducted to identify gaps between the current and ideal situation, in order to best accommodate these children's needs. Specifically, the purpose of the assessment is to learn what the best methods are to prepare the faculty and staff of NTES for working with these special needs populations. This will help ensure that these students receive the most effective, well-rounded education possible in the least restrictive environment.

Furthermore, Dr. Fonville is concerned with how faculty and staff will respond to behavioral issues exhibited by autistic children such as violent outbursts and self-mutilating behavior, as well as communication with non-verbal autistic students. In any given situation where a child becomes aggressive or harms themselves, and the staff member is unable to properly handle the incident, the child or others may be severely injured or endangered. Likewise, without effective communication strategies for working with non-verbal children, staff may not be aware of the child's basic needs resulting in health and hygiene issues going unresolved. Correct procedures must be put in place for restraint of children during violent and self-injurious episodes, as well as communication strategies for working with the non-verbal students.

This needs assessment plan defines the context the situation, the purposes of the needs assessment, the model that will be used in conducting the needs assessment, the resources and constraints, as well as the tools, techniques, and stages for data collection.

Context Analysis

North Topsail Elementary School is located on the eastern side of Pender County just north of Hampstead, North Carolina. Currently, enrollment is at 647 students in grades K-5. For the past three years NTES has been identified as a Title I school due to a greater than forty percent enrollment of students who receive free and reduced lunch. Additionally, NTES employs a faculty and staff of 70. Of these 70 employees, ten work in Kindergarten, eight work in First Grade, six in Second Grade, four in Third Grade, three in Fourth Grade, four in Fifth Grade, three in the Library, ten Cafeteria staff, five Office staff (including two Administrators), eight Exceptional Children staff, two Title I Reading Specialists, three Janitorial staff, one School Resource Officer, and three elective teachers.

The 2005-2006 school year brought a new population of learners into NTES. Three students with autism spectrum disorders were enrolled including a kindergarten student with low-functioning autism, a second grade student with high-functioning autism, and a third grade student with mid-range autism. In addition, seven new students with varying levels of autism related disorders will begin attending NTES at the start of the 2006-2007 school year.

According to the Individuals with Disabilities Education Act (IDEA), all students must be afforded the best possible education in the least restrictive environment. This federal law mandates that the faculty and staff in affected schools must do everything possible to provide that education; therefore school employees must be educated about students' needs, specifically those students on the autism spectrum (IDEA, 2006). The goal for NTES, according to Dr. Fonville, is to correctly implement the standards for providing special needs students with an education, in order to serve all their students to the best of their ability, and to maintain Title I funding status and accreditation.

Educational levels among the staff vary widely. The janitorial and cafeteria staff all completed an accredited high school degree program, the School Resource Officer and nine of the paraeducators have associates degrees, the remaining staff members all have a minimum education level of a bachelors degree in their respective fields, six classroom teachers as well the assistant principal and guidance counselor have their masters degree, and the principal has both a masters level degree and a doctoral degree.

Similarly, experience levels vary greatly among faculty with years of teaching experience ranging from one year to thirty-three years. Only five staff members have direct experience in working with children with autism. Three of these staff members have received a "crash course" style education in dealing with this specific disability over the course of the Fall of 2005. Staff members were given a short and concise introduction to dealing with students on the autistic spectrum in the classroom along with behavioral modifications and techniques to use to help their integration into a traditional classroom go as smoothly as possible. Other faculty members discussed autism on a limited scope during their educational degree programs, but have no relevant experience with these children and their specific needs.

The administration, faculty, and staff at NTES have a positive attitude and see the relevance of learning to meet the behavioral and communication needs of this new population of students. The mission of the Pender County Schools is to facilitate student growth and learning so that each child develops to their maximum potential. Achieving

this mission will enable each child to obtain a higher standard of living and be a contributing member of society. The staff sees that the only way to adhere to the district's mission is to constantly find ways of adapting their current instruction based on the needs of their learners. Support for this change will be provided to the staff by both the school administration and county oversight administration because they know the importance of providing the best possible education for these children. Therefore, this project has been given a high priority due to its relevance and the immediate induction of student body changes at NTES. The school and county administration will make resources available as needed for this project to facilitate rapid development and implementation of the chosen solution.

Unfortunately, there are several constraints that have been identified for this project (see Appendix A). One major constraint is the short amount of time that is available to implement the appropriate solution. One possibility for bypassing this constraint is to incorporate a solution into the current school schedule and operations systems, which will alleviate any need for additional time and money commitments, as much as possible. Our time limit is also very constrained for the actual collection of data, so all data collection will be performed during faculty and staff meetings to ensure that information is collected from everyone in the most convenient and feasible manner. Additionally, there is limited extant data available on staff interaction and reaction to autistic students' behavioral and communication needs. This is due to the staff having only brief and limited experience with autistic students at NTES. In order to lesson the effects of this constraint, data will be collected using observations of the behavioral and communication strategies being used with the current student population. Subject Matter Experts will be also be interviewed as a part of the subject matter analysis, as well as a literature review.

Purpose of Needs Assessment

The purpose of this needs assessment is to identify solutions that will help faculty and staff appropriately deal with potentially violent behavior and lack of basic communication with autistic students. In addition, we need information related to best practices for physically restraining students, interacting with emotionally volatile children, and understanding non-verbal communication of basic wants and needs. The needs assessment will also focus on identifying the attitudes of staff concerning this population of students and their willingness to work with them.

These data will be gathered through observation, literature review, interviews, and surveys. Multiple techniques such as extant data analysis, subject matter analysis and needs assessment will be conducted using these tools. Final outcomes of this needs assessment will be presented to the principal and county administrators in order to present them with possible appropriate solutions to this problem, based on the analysis and proposed recommendations.

Description of the Model

This project's needs assessment will be conducted according to Allison Rossett's Training Needs Assessment (TNA) model. This model presents training needs assessment as a "systematic study of a problem or innovation, incorporating data and opinions from varied sources, in order to make effective decisions or recommendations about what should happen next." (p.3) Rossett outlines the steps for conducting a successful needs assessment as follows: 1) Assessing the Context, 2) Determining Purposes, 3) Selecting Techniques and Tools, 4) Developing a TNA Plan, 5) Developing TNA Stage Planners, 6) Implementation of the Plan, and 7) Communication of the Results to Stakeholders. This model will be utilized to collect information on optimals, current practices, feelings of stakeholders, and solutions based on the introduction of a new student population (new system).

Data Collection Plan

This TNA will begin February 17, 2006 and will conclude on March 17, 2006 (see Appendix B). The tools that have been selected to address the purposes of the TNA are observation, literature review, interviews, and surveys (see Appendix C). Techniques that will be employed are extant data analysis, subject matter analysis, and needs assessment.

Appendix A

Table 1: Resources and Constraints

Resources	Constraints
Subject Matter Experts: • Julie Ather • Trisha Torkildsen	Limited extant data
Administrative Support • School • County	Time limit for collecting data
Faculty and Staff of NTES	Short timeline for implementing solutions

Appendix B

Table 2: Purposes of TNA

Description	Status	Sources
Optimals	Some are known/Need more information on general needs as well as extreme ASD students needs	SMEs Literature review
Actuals	Some are known/Need further information on disruptive students and communication	Observation
Feelings	Need	Faculty and Staff surveys
Causes	Known	Early enrollment information
Solutions	Need	SMEs Faculty, Staff, SMEs, and administration

Appendix C

Table 3: Techniques and Tools

Stages/Techniques	Tools and Sources
1) Extant Data Analysis	Observation of teachers, paraeducators, and other staff of current practices related to behavior management and curriculum as related to communication needs of current student population.
2) Subject Matter Analysis	Conduct literature review of relevant materials to familiarize the needs assessment team with background information on autism.
3) Subject Matter Analysis	Interview SMEs: Julie Ather (Special Edcucation Department Chair-NTES) and Trish Torkildsen (Special Needs Teacher-CFCI) for best practice information.
4) Needs Assessment	Survey faculty and staff at NTES to gather information on knowledge, attitudes and skills related to autism.
5) Needs Assessment	Interview NTES administration with questions concerning possible solutions, their feasibility, and also with any follow up questions based on survey results.

Appendix D

1) SUBJECT OF TNA: How can North Topsail Elementary School provide appropriate behavioral and communication modifications for students with Autism Spectrum Disorders (ASD)?

   STAGE NUMBER 1

2) SUMMARY OF WHAT YOU ALREADY KNOW ABOUT THE SUBJECT: We know that NTES faculty and staff is facing a new population of students with special needs in behavioral and communication areas specifically because they are diagnosed with autism spectrum disorders.

3) SUMMARY OF INFORMATION BEING SOUGHT DURING THIS STAGE: The purpose of this stage is to collect data on current behavior management strategies being used in the classroom as well as review current practices in teacher/student communication.

4) WHO OR WHAT ARE THE SOURCES OF INFORMATION FOR THIS STAGE: classroom teachers, paraeducators, students

5) WHAT TNA TOOLS WILL BE USED TO CARRY OUT THIS STAGE: observation

6) IF YOU WILL BE INTERVIEWING OR SURVEYING, WHAT QUESTIONS WILL YOU ASK? IF YOU WILL BE OBSERVING, WHAT WILL YOU BE WATCHING? IF YOU WILL BE USING A GROUP MEETING, WHAT IS YOUR AGENDA?: We will be observing how teachers interact with students focusing specifically on behavior management and how teachers deal with disruptive behavior as well as how teachers communicate with different ability level students.

1) SUBJECT OF TNA: How can North Topsail Elementary School provide appropriate behavioral and communication modifications for students with Autism Spectrum Disorders (ASD)?

   STAGE NUMBER 2

2) SUMMARY OF WHAT YOU ALREADY KNOW ABOUT THE SUBJECT: At this stage we have knowledge of current practices in both behavior management/intervention as well as knowledge of how teachers communicate with the current student population.

3) SUMMARY OF INFORMATION BEING SOUGHT DURING THIS STAGE: During this stage we are seeking information about the general behavioral and communication needs of students with ASD and other background information about ASD.

4) WHO OR WHAT ARE THE SOURCES OF INFORMATION FOR THIS STAGE: Relevant literature recommended by SMEs and searchable databases with scholarly articles.

5) WHAT TNA TOOLS WILL BE USED TO CARRY OUT THIS STAGE: Literature Review

6) IF YOU WILL BE INTERVIEWING OR SURVEYING, WHAT QUESTIONS WILL YOU ASK? IF YOU WILL BE OBSERVING, WHAT WILL YOU BE WATCHING? IF YOU WILL BE USING A GROUP MEETING, WHAT IS YOUR AGENDA?

1) SUBJECT OF TNA: How can North Topsail Elementary School provide appropriate behavioral and communication modifications for students with Autism Spectrum Disorders (ASD)?

   STAGE NUMBER 3

2) SUMMARY OF WHAT YOU ALREADY KNOW ABOUT THE SUBJECT: We have data on current behavior management practices and communication strategies used at NTES. Additionally, we have information about ASD and the general behavioral needs and communication needs of ASD students from the relevant literature.

3) SUMMARY OF INFORMATION BEING SOUGHT DURING THIS STAGE: In this stage we are looking to gather information about best practices for dealing with ASD students' needs in the classroom and school environment.

4) WHO OR WHAT ARE THE SOURCES OF INFORMATION FOR THIS STAGE: SMEs (Julie Ather, Trisha Torkildsen)

5) WHAT TNA TOOLS WILL BE USED TO CARRY OUT THIS STAGE: Interviews

6) IF YOU WILL BE INTERVIEWING OR SURVEYING, WHAT QUESTIONS WILL YOU ASK? IF YOU WILL BE OBSERVING, WHAT WILL YOU BE WATCHING? IF YOU WILL BE USING A GROUP MEETING, WHAT IS YOUR AGENDA?
   - What are your experiences with integrating children Autistic Spectrum Disorders into a general classroom?
   - In your opinion, what are the biggest challenges with mainstreaming?
   - Are there any general requirements or materials that are needed within a class of Autism Spectrum Children (environmental, curriculum modifications, instructional methods, etc.)?
   - What assessment instruments or methods have you utilized when evaluating specific children and their needs?
   - Are there any specifics that a general classroom teacher should know about dealing with Autism Spectrum Children that you feel they may not be aware of?
   - What are your experiences with integrating children Autistic Spectrum Disorders into a general classroom?
   - What human resources or services do you have available (speech/language therapy, occupational therapy, physical therapy, speech training for parents, special training for teachers, teachers aids, etc.)?
   - What financial resources are available for procurement of any necessary materials for Autism Spectrum Disorder students?
   - What assessment instruments or methods are you using to evaluate the individual Autism Spectrum Disorder students needs?
   - If students are determined to be good candidates for a smaller, highly structured learning environment as opposed to a fully integrated classroom, how prepared is NTES to accommodate the needs of those students?
   - Are there any specifics that a general classroom teacher should know about dealing with Autism Spectrum Children that you feel they may not be aware of?

1) SUBJECT OF TNA: How can North Topsail Elementary School provide appropriate behavioral and communication modifications for students with Autism Spectrum Disorders?

   STAGE NUMBER 4

2) SUMMARY OF WHAT YOU ALREADY KNOW ABOUT THE SUBJECT: Understanding of current practices, subject matter, and optimal performance goals.

3) SUMMARY OF INFORMATION BEING SOUGHT DURING THIS STAGE: Seeking information about knowledge, attitudes and skills of the faculty and staff.

4) WHO OR WHAT ARE THE SOURCES OF INFORMATION FOR THIS STAGE: Faculty and Staff at NTES

5) WHAT TNA TOOLS WILL BE USED TO CARRY OUT THIS STAGE: Survey

6) IF YOU WILL BE INTERVIEWING OR SURVEYING, WHAT QUESTIONS WILL YOU ASK? IF YOU WILL BE OBSERVING, WHAT WILL YOU BE WATCHING? IF YOU WILL BE USING A GROUP MEETING, WHAT IS YOUR AGENDA? See Appendix E

1) SUBJECT OF TNA: How can North Topsail Elementary School provide appropriate behavioral and communication modifications for students with Autism Spectrum Disorders?

   STAGE NUMBER 5

2) SUMMARY OF WHAT YOU ALREADY KNOW ABOUT THE SUBJECT: Knowledge of subject matter, optimal performance, information about knowledge, attitudes and skills of faculty and staff.

3) SUMMARY OF INFORMATION BEING SOUGHT DURING THIS STAGE: Any follow-up information needed from the surveys as well as information regarding possible solutions for the problem and implementation of the change from administration.

4) WHO OR WHAT ARE THE SOURCES OF INFORMATION FOR THIS STAGE: NTES administration.

5) WHAT TNA TOOLS WILL BE USED TO CARRY OUT THIS STAGE: Interview

6) IF YOU WILL BE INTERVIEWING OR SURVEYING, WHAT QUESTIONS WILL YOU ASK? IF YOU WILL BE OBSERVING, WHAT WILL YOU BE WATCHING? IF YOU WILL BE USING A GROUP MEETING, WHAT IS YOUR AGENDA?

   - What human resources are currently available?
   - What resources need to be procured for Autism Spectrum Disorder students?
   - Is there a specific budget set aside for these students (i.e., budget constraints)?
   - Are there funding sources that you are aware of, but have not received money from yet?
   - Additional questions based on results of surveys

Appendix E

Survey Instrument

Thank you for taking the time to complete this brief survey. The purpose of this survey is to determine your level of knowledge and skill pertaining to children with Autism. Autism is a developmental disability that affects a person's ability to communicate, understand language, play and interact with others. The outcome of this survey will be a written report outlining any pertinent identified educational needs of faculty and staff members. Your responses are anonymous and will not affect any aspect of your performance review. Please return the survey to Amanda Hodges by March 8, 2006. If you have any questions or concerns regarding this survey, please contact Melissa Ennis (phone: 231. 2085, e-mail: ennism@uncw.edu) or Kristen Lee (phone: 262.2683, e-mail: krl5486@uncw.edu).

1) Do you have any experience working with students on the autistic spectrum?

☐ Yes   ☐ No (skip to question 2)

   A) If you checked yes, was the person on the autistic spectrum (check all that apply):

   ☐ A student

   ☐ Your child

   ☐ Other family member

   ☐ A friend/acquaintance

   ☐ Other _____

   B) Please rate your level of experience and/or knowledge of students on the autistic spectrum by circling the number best describing yourself below:

1	2	3	4
Minimal	Some experience but no official training	Familiar and have received some training	Expert and have received training, certificate or degree

   C) Please list any certificates, degrees, workshops, or training you have obtained pertaining to students on the autistic spectrum (include dates).

   D) Do you specialize in any of the following areas?

   ☐ Occupational Therapy

   ☐ Speech Therapy

   ☐ Physical Therapy

2) Are you aware that students on the autistic spectrum are currently attending North Topsail Elementary School?

☐
Yes

☐
No

3) Are you willing to receive specialized training on how to work or interact with students on the autistic spectrum at your school?

☐
Yes

☐
No

4) If a training program were provided, what is your preference for training format?
(Rank the following: 1-most preferable, 4-least preferable)

    ____a) large group workshop
    ____b) small group workshop
    ____c) individual training (1-on-1)
    ____d) computer-based instruction or self-instructional
          module

5) Please indicate your faculty or staff classification:

    ____a) Teacher
        If so, which grade? ____
    ____b) Administration
    ____c) Janitorial Staff
    ____d) Cafeteria Staff
    ____e) Library Staff
    ____f) Itinerate Teacher (Art, Music, PE, etc.)
    ____g) Special Needs Staff

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